

**VOLVO MOTOR GRADERS**

# **FINE GRADING**



**MORE CARE. BUILT IN.**



# THE RIGHT START FOR A PERFECT FINISH

Precision, power, speed... fine grading performance starts with the right balance of toughness and touch.

## Up to the test

The ability to put the finishing touch to a precisely graded surface is the ultimate test of motor graders and of the people who operate them. It's a finesse job, built on the strength and confidence you only get in a Volvo.

## Nothing finer

The Volvo G900 line-up offers a range of seven motor graders, all based on the engineered essentials for exceptional fine grading performance.

Machines powered by Volvo are renowned for high torque at low RPMs, producing responsive fuel-efficient performance while operating at slow ground speeds. When you call for strength to hold and turn loads smoothly, your Volvo G900 circle drive comes through without hesitation.

Decades of grader experience show through in the long wheelbase and bladebase of every G900 Grader.

This design adds stability to produce a finished surface that is level and free of deficiencies.

The high-capacity G900 Proportional Demand Flow (PDF) hydraulic system ensures power and precision when and where you need it, instantly responsive to your every demand around services and curbs.

## Precision in motion

Fine work means control, and control begins with a solid stance. The wide stance of G900 blade lift cylinders, coupled with the low angle side shift cylinder, provides the most stable grading platform in the industry.

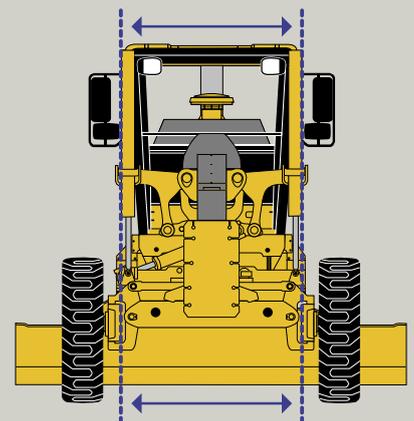
This strength is complemented by the flexibility of the G900 blade mobilities to sculpt a complete range of slope profiles. Plenty of reach outside the tires lets operators keep tight to curves and corners, meaning minimal handwork to follow up for a faster finish.

## Run hard

Heavy-duty G900 inching clutches and a powerful twin gear direct-drive circle turn system translate responsive control into smooth, fast earthmoving results. High blade down forces help you to accurately trim off heavily compacted soils and aggregates to get more one pass finishing with cost-saving accuracy.

## CHECK LIST

- ✓ High torque at low engine speeds
- ✓ Low speed operation
- ✓ Long bladebase
- ✓ Long wheelbase
- ✓ Tight turning radius
- ✓ Blade down force
- ✓ Drawbar pull



## Taking a strong stance

The distinctive wide stance - parallel geometry of the Volvo blade lift system results in greater precision and less work for your operator.

With the lift cylinders set wide apart and the side-shift cylinder at a near horizontal angle, G900 Graders minimize operator effort as less opposite side correction is required as the moldboard is re-positioned. This design, coupled with Volvo's consistent and predictable PDF hydraulic system, results in the industry's most stable grading platform for accurate grade control.

Ask your Volvo dealer to help you match the right grader to your applications with **Grader ProCal Site Simulation.**



### **The right tools in the right hands**

Volvo Motor Graders were designed with help from some of the industry's most experienced operators, to ensure that G900 machines work effectively with the people who make them productive in the most challenging jobs.

It begins with the industry-standard pedestal arrangement that skilled operators trust for a precise feel at the fingertips. The levers are carefully positioned relative to the steering wheel for comfortable, intuitive access so eyes stay fixed on the ground. Low-effort, short throw levers are coupled to responsive hydraulics to maintain the professional touch with less fatigue all through another hard-working day.



# GOING YOUR WAY

Advanced grader technology and features from Volvo give you more choices to match your machine to the work you do.

## A perfect match

You know you've got the machine you want because you made it the machine you need. Volvo G900 Motor Graders give you the flexibility to spec your machine for a perfect match to your jobs and working conditions.

## Bigger, smaller, better

With a complete range of motor graders to cover every fine grading requirement, the Volvo G900 family includes two specially sized machines for special duty applications.

The G930 Motor Grader offers full size power in a machine that's measurably shorter than other G900 Graders, providing extra agility and compact maneuverability in confined work spaces.

At the other end of the scale, the G990 Motor Grader is longer, taller, wider and strengthened all around to put extra muscle behind big finishing projects.

## The power to choose

Volvo transmission options are your first step to achieving total control in fine grading applications.

Whether you choose the standard HTE840 8-speed transmission or the optional HTE1160 model with 11 forward speeds, your G900 Grader delivers power to the ground through a gear system designed and built by Volvo specifically for grading applications.

With the optional Autoshift mode for Volvo HTE840 transmissions, you simply select the target gear and let the transmission shift automatically through turns and grades as needed – while you keep your attention on the ground!

The exclusive 11-speed Volvo transmission, equipped with Autoshift mode as standard, is an industry first. With expanded speed ranges in both directions, including one speed slower than any other grader transmission Volvo delivers ultra-fine grading precision.

Both Volvo transmissions feature "shuttle shifting" capability to give you faster cycle times with less fatigue and more work done at day's end.

## The "blue-topper's" choice

The famous Volvo "Care Cab" creates a work environment that keeps top operators comfortable and alert through long days doing what they do best. G900 Motor Graders feature the industry standard controls with the low-effort levers preferred by operators with experienced hands.

Large deep windows ensure a clear line-of-sight from cab to moldboard. Optional opening front windows enhance the view with an unobstructed, glare-free look at the work surface. The extensive package of standard interior and exterior rear-view mirrors keep the jobsite visible, so operators feel safe and confident as they work.





### **Ultimate precision**

Proven on jobsites since 1999, Volvo Creep Mode sets today's benchmark for fine-grading control by allowing the operator to grade using only the hydrostatic front wheel drive. Operating at speeds under 4,0 km/h (2,5 mph), Creep Mode is easily selected via the transmission controller. The front-wheel-only drive is controlled simply by pressing the accelerator pedal as the rear tandems roll freely behind to minimize scuffing and rework. Creep Mode allows extremely smooth starts and stops, eliminating ridges often left by the moldboard in a conventional grader. The result is more precise passes requiring less time to complete the job.

# INDISPENSABLE “EXTRAS”

Get your G900 Grader with all the right “extras” on board to help you do more, produce more, to maximize the performance and utilization of your machine.

## No compromise

Many grader operators who acquire a machine for a specific task often find themselves doing more. With attachments built and approved by Volvo, G900 Motor Graders adapt to year-round duties without compromising design integrity.

## Real world flexibility

G900 Motor Graders are purpose-built with a true tool-carrier frame designed to withstand the rigors of all-season service. Field-proven through years of grader service, the Volvo full perimeter rear frame is designed not only to provide effective support for attachments, but also permits modular mounting of all major powertrain components.

## Easy as ABC

Volvo's PDF hydraulic system balances flow between all grading functions for consistent and predictable implement control. As a result, G900 Motor Graders are ideally suited for all leading Automatic Blade Control systems.

To finish the job, optional mounting brackets, hydraulic and electrical connections are designed exclusively

for machine control systems. Even the pedestal head has mounting locations for grade displays. So no matter what brand of machine control you currently use, the G900 is ready.

## The choice is yours

Your Volvo dealer is ready to help you turn your G900 Grader into the ideal machine for your operation. It's easy with pre-selected option kits such as the Fine Grade Contractor package. Or pick and choose exactly the options you need such as:

- Cab-mounted rear floodlights
- Moldboard-mounted work lights
- Opening lower-front windows
- Heavy-duty 5-shoe circle support system
- Manual or auto-reversing cooling fan
- High capacity alternator

...plus a wide selection of optional comfort features to help you get the best from both your operator and your machine.



# Specifications

‡ With All Wheel Drive engaged

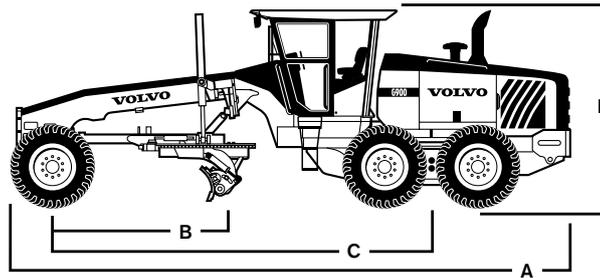
Model		G930	G940	G946	G960	G970	G976	G990
Base operating weight - approximate	kg (lb)	15 800 (34,830)	16 400 (36,150)	17 300 (38,140)	17 550 (38,690)	18 900 (41,660)	19 800 (43,650)	22 100 (48,720)
Engine model/displacement		7.2 L/D7E	7.2 L/D7E	7.2 L/D7E	7.2 L/D7E	9.4 L/D9B	9.4 L/D9B	9.4 L/D9B
Low range net power	kW (hp)	115 (155)	130 (175)	145* (195*)	145 (195)	156 (210)	168* (225*)	168 (225)
Mid range net power	kW (hp)	130 (175)	145 (195)	160* (215*)	160 (215)	171 (230)	183* (245*)	183 (245)
High range net power	kW (hp)	145 (195)	160 (215)	175* (235*)	175 (235)	186 (250)	198* (265*)	198 (265)
Blade pull at base weight (0.9 traction co-efficient)	kg (lb)	9 990 (22,023)	10 530 (23,211)	14 925 (32,908)	11 205 (24,705)	12 240 (26,982)	16 635 (36,679)	14 310 (31,545)
Blade down force capability	kg (lb)	8 188 (18,021)	8 131 (17,895)	8 650 (19,035)	8 823 (19,421)	9 253 (20,420)	9 776 (21,574)	11 058 (24,457)
Ground clearance	mm (in)	610 (24)	610 (24)	610 (24)	610 (24)	590 (23.2)	590 (23.2)	615 (24.2)
Minimum turning radius	mm (ft)	7 265 (23'10")	7 265 (23'10")	7 265 (23'10")	7 265 (23'10")	7 700 (25'3")	7 640 (25'1")	8 150 (26'9")

## Dimensions

Model		G930	G940	G946	G960	G970	G976	G990
All dimensions are approximate	A mm (in)	8 930 (352)	9 150 (360)	9 150 (360)	9 150 (360)	9 500 (374)	9 500 (374)	9 730 (383)
	B mm (in)	2 675 (105)	2 650 (104)	2 650 (104)	2 650 (104)	2 790 (110)	2 790 (110)	2 935 (116)
	C mm (in)	6 280 (247)	6 280 (247)	6 280 (247)	6 280 (247)	6 531 (257)	6 531 (257)	6 681 (263)
	D mm (in)	3 225 (127)	3 225 (127)	3 225 (127)	3 225 (127)	3 225 (127)	3 225 (127)	3 280 (129)

### Legend

- A = Overall length
- B = Bladebase per ISO 7134
- C = Wheelbase
- D = Overall height
  - with Low Profile Cab
  - Add 217 mm (8.5") for full height cab



## Optional Equipment

Model (O - Optional)	G930	G940	G946	G960	G970	G976	G990
Brackets for Automatic Blade Control System installation	O	O	O	O	O	O	O
HTE1160 11 speed transmission, 11 speeds forward 6 speeds reverse includes Autoshift and Travel functions	O	O	O	O	O	O	O
Rear worklights cab mounted - 2 lamps	O	O	O	O	O	O	O
Moldboard work lights - 4 lamps	O	O	O	O	O	O	O
High capacity alternator - 2400 watt - 100 amp	O	O	O	O	O	O	O
Opening lower front windows	O	O	O	O	O	O	O
Sliding side windows (left and right)	O	O	O	O	O	O	O
Rear window blind - retractable	O	O	O	O	O	O	O
Deluxe air suspension, cloth covered fully adjustable suspension seat with 75 mm (3") seat belt	O	O	O	O	O	O	O
Air conditioner - 35,000 BTU with 50,000 BTU cab heater	O	O	O	O	O	O	O
Radio/CD player with 4 speakers	O	O	O	O	O	O	O
Dual arm front windshield wipers, increased coverage	O	O	O	O	O	O	O
Intermittent wipers on all wipers ordered	O	O	O	O	O	O	O

Visit the "Dealer Locator" section of our website to find the Volvo Grader experts in your area.



Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 175 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different – **More care. Built in.**



*Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.*

# **VOLVO**

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